600 CE SERIES

GAS BROILER

INSTALLATION – OPERATION - MAINTENANCE

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31-01-12962 rev B
L25-004 rev 1 (05/11)

IMPORTANT

INSTALLATION, SERVICING, OR CONVERSION OF THIS APPLIANCE TO BE CARRIED OUT BY QUALIFIED SERVICE TECHNICIANS/INSTALLERS IN CONFORMANCE WITH NATIONAL AND LOCAL REGULATIONS.

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT

INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE USER SMELLS GAS MUST BE POSTED IN A PROMINENT LOCATION. THIS INFORMATION MAY BE OBTAINED BY CONTACTING YOUR LOCAL GAS SUPPLIER.

FOR YOUR SAFETY
Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

The information contained in this manual is important for the proper installation, use, and maintenance of this unit. Adherence to these procedures and instructions will result in satisfactory grilling results and long, trouble free service. Please read this manual carefully and retain it for future reference.

THIS APPLIANCE IS INTENDED FOR PROFESSIONAL USE BY QUALIFIED PERSONNEL ONLY, ***NOT FOR INDIVIDUAL/HOME USE*****.**

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

For installation or maintenance, contact your local dealer or authorized service agent. Installation or service by other than MagiKitch'n authorized service agencies or personnel may void warranty coverage. Call Pitco Frialator Technical Support at 603-225-6684 who will put you in touch with the proper local service organization or make service arrangements for you.

Installation

Delivery and Location
Broiler Assembly
Gas Connection and Conversion

Operation

Broiler Set Up
Lighting Instructions
General Charbroiling Tips

Maintenance

Cleaning and Preventative Maintenance
Accessory and Replacement Parts List

Installation

Delivery and Location

DELIVERY

Each broiler was carefully inspected and packaged before being tendered to the carrier. Upon delivery of your new broiler:

- Uncrate the broiler and check for damage. Most carriers will accept claims for damage if they are notified within seven days of delivery and the shipping container is retained for inspection.

NOTE: The broiler top grid is shipped underneath the unit. Be sure to remove it before disposing of the packing crate.

MagiKitch'n cannot assume responsibility for loss or damage suffered in transit. The carrier assumed full responsibility for delivery in good order when the shipment was accepted.

LOCATION

- Place the unit in a properly ventilated area.
- Keep the area free and clear of all combustibles such as paper, cardboard, and flammable liquids and solvents.
- This unit requires 0cm minimum clearance to non–combustible construction. The unit is not approved for installation in areas with combustible construction.
- Provisions must be made for an adequate air supply to the broiler.
- Keep the area in front of the unit free from obstructions that could block the flow of combustion and ventilation air.
- Be sure there is sufficient clearance at the rear of the unit for gas connections, regulator and any master shutoff valve(s) to be installed.
- The location must provide adequate clearance for servicing.

Before making any gas connections to this broiler, check that the available gas supply meets the requirements for supply pressure and gas type shown on the rating plate on the front of the unit.

Installation

Broiler Assembly

NOTE: This appliance shall be installed in accordance with current regulations and used only in a well–ventilated space. Refer to these instructions before installing and using this appliance.

NOTE: Installation and connection must be performed by a qualified installer only.

COUNTERTOP MODELS

Countertop models must be sealed to the counter surface in compliance with National and Local Sanitation standards.

1. Apply a 13mm bead of silicone to the bottom of the broiler. The silicone should run approximately 6mm from the front, back and side edges of the unit.

LEG ATTACHMENT

The 15 cm legs are packed in the top section of the broiler.

1. Screw the legs into the threaded holes in the corners on the bottom of the broiler.
2. Place the broiler onto the legs.
3. Turn the adjustable leg feet to level the oven.

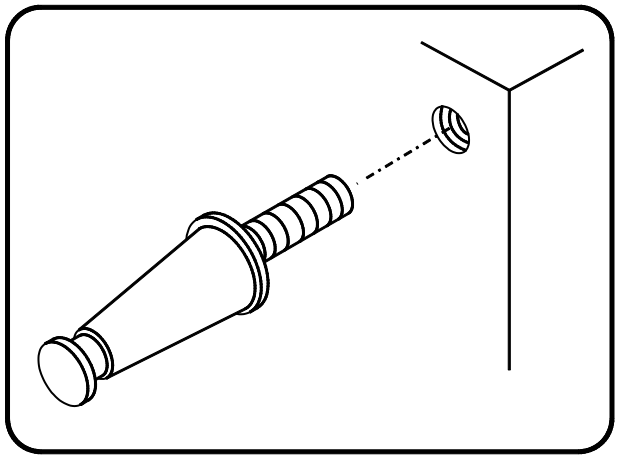


Figure 1

CASTER INSTALLATION

A flexible hose/connector must be used on any broiler installed on casters. The connector must meet National and Local codes.

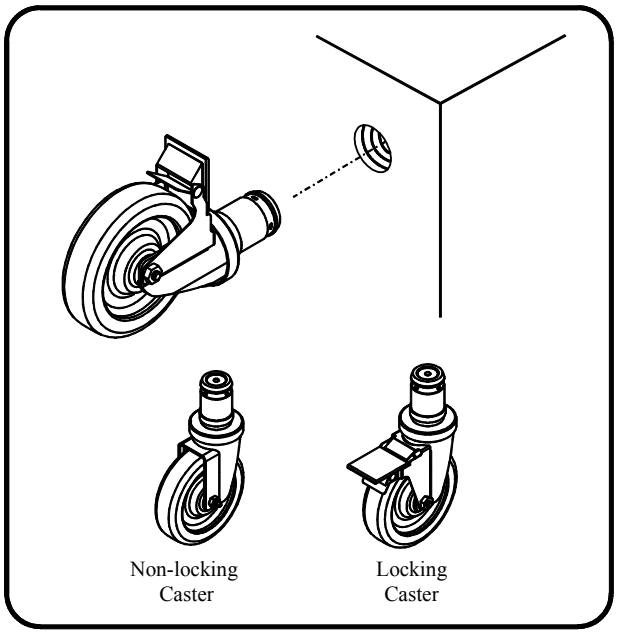
A restraint must be used to limit the movement of the appliance. **Limited movement cannot depend on the flexible connector.** DO NOT attach the restraint to gas piping or electrical conduit!

⚠ WARNING!!
If the restraint is disconnected for any reason it must be reconnected when the unit is returned to its original position.

1. Screw the casters into the threaded holes in the corners on the bottom of the broiler.

   NOTE: The locking casters must be installed on the front of the broiler.
2. Place the broiler onto the casters.

Figure 2



GAS CONNECTION

An adequate gas supply is required for proper broiler performance. With all burners on "HIGH", the manifold pressure should not show any appreciable drop. Fluctuations of more than 25% will create pilot problems and affect burner operation.

WARNING!!
This unit must be connected ONLY to the type of gas specified on the rating plate.

1. Remove the hairpin clips securing the burners. This will allow for removal of the burners for inspection, cleaning and servicing.
2. Attach the regulator supplied with the unit. The regulator must be installed at the entry end of the gas manifold.

   NOTE: Be sure the regulator is installed so that the gas flows in the same direction as the arrow on the bottom of the regulator. ***Use the supplied regulator only. Use of any other regulator will invalidate the warranty.***
3. Adjust the regulator to the burner pressure listed on the rating plate. Refer to the table on the following page for proper pressure settings.

   NOTE: A pressure regulator is not required for all countries.
4. Use pipe joint compound suitable for use with LP gas on all threaded connections.
5. Turn off all burner valves.
6. Turn on the gas supply. Check all connections for gas leaks using soap and water. **Never use an open flame to check for gas leaks!**

GAS CONVERSION

All units are shipped with the appropriate orifices and components required for the gas requested. If the unit does not perform well or has unsatisfactory flame characteristics (too high, yellow tips, lifting), check that the supply pressure and orifice size are appropriate for the gas used before making any adjustments.

Use the following directions to convert the unit to a different type of gas if necessary. Each conversion kit contains all the orifice sizes and markings required for converting any size unit to any gas type in all countries. Note that in Belgium units may not be converted. For some conversions it may also be necessary to replace the regulator or restrictor orifice.

NOTE: Refer to the table on the following page to determine gas requirements, pressure settings and orifice sizes.

1. Shut off the gas supply to the unit.
2. Disconnect the unit from the gas supply.
3. Remove the top grids, radiants, runner tubes and burners.
4. Remove the brass runner tube orifice. Replace with the new orifice.
5. Remove all burner orifices. Replace with the new orifices.
6. Adjust the air shutters on all the burners to the correct opening. Mark the air shutter at the correct setting. Re-install the burners.
7. Re-install the runner tubes, radiants, and top grids.
8. Adjust the regulator to the correct gas pressure. If a restrictor orifice is required in place of the regulator to meet your countries specific codes, remove the old restrictor orifice and replace it with a new one correctly sized to provide the burner pressure specified for the gas type being used.
9. Adhere the appropriate conversion sticker to the front of the unit, near the rating plate.

Gas Connection and Conversion Information for 600-CE Model Broilers

Country	Appliance Category	Gas Category	Gas Type	Supply Pressure (mb)	Burner Pressure (mb)	Main Burner (mm)	Air Shutter (mm)
NL	II2L3B/P	2L	G25	25	10.7	1.85	open
		3B/P	G30	30	29.5	1.02	open
	II2L3P	3P	G31	50	36.5	1.02	open
BE	I2E+	2E+	G20/25	20/25	16.6/20.6	1.5	9.0
	I3+	3+	G30/31	30-37	29.5-36.5	1.02	open
FR	II2E+3+	2E+	G20/25	20/25	16.6/20.6	1.5	9.0
		3+	G30/31	30-37	29.5-36.5	1.02	open
DE	II2ELL3B/P	2ELL	G20/25	20	16.6-10.7	1.5-1.85	9.O-open
		3B/P	G30	50	29.5	1.02	open
GB	II2H3P	2H	G20	20	16.6	1.5	9.0
		3P	G31	50	36.5	1.02	open
IT	II2H3+	2H	G20	20	16.6	1.5	9.0
		3+	G30/31	30-37	29.5-36.5	1.02	open
ES	II2H3+	2H	G20	20	16.6	1.5	9.0
		3+	G30/31	30-37	29.5-36.5	1.02	open
PT	II2H3+	2H	G20	20	16.6	1.5	9.0
		3+	G30/31	30-37	29.5-36.5	1.02	open
SE	II2H3B/P	2H	G20	20	16.6	1.5	9.0
		3B/P	G30	30	29.5	1.02	open
DK	II2H3B/P	2H	G20	20	16.6	1.5	9.0
		3B/P	G30	30	29.5	1.02	open
FI	II2H3B/P	2H	G20	20	16.6	1.5	9.0
		3B/P	G30	30	29.5	1.02	open
AT	II2H3B/P	2H	G20	20	16.6	1.5	9.0
		3B/P	G30	50	29.5	1.02	open
NO	I3B/P	3B/P	G30	30	29.5	1.02	open
IE	II2H3P	2H	G20	20	16.6	1.5	9.0
		3P	G31	50	36.5	1.02	open
GR	II2H3B/P	2H	G20	20	16.6	1.5	9.0
		3B/P	G30	50	29.5	1.02	open
LU	II2E3B/P	2E	G20	20	16.6	1.5	9.0
		3B/P	G30	50	29.5	1.02	open

Runner Tube Orifice (mm)

Gas Type	624/648	630/660	636/672
G20	0.87	0.98	1.065
G25	0.87	0.98	1.065
G30	0.52	0.58	0.63
G31	0.52	0.58	0.63

Heat Input (kW)

	624	630	636	648	660
H_s	16.5	25.2	29.3	41.1	50.1
H_i	14.9	22.7	26.4	37.1	45.2

Operation

Broiler Set Up

NOTE: After initial installation, the unit must be thoroughly cleaned prior to operation. Refer to the Maintenance section of this manual for cleaning instructions.

Top Cooking Grid

The cooking grid has two positions, flat or tilted.

- To place the grid in the tilted position, push down on the grid handle and pull forward to engage the grid hook.
- To place the grid in the flat position, pull up on the grid handle and push back to disengage the grid hook.

When broiling, the grid must be in the tilted position. This allows some of the grease to drain into the front trough, reducing both smoke and flare–up. The flat position should only be used to heat soups, sauces, etc. **DO NOT use the flat position for broiling.**

Radiants and Grease Shield

The radiants must be in place prior to operating the unit. The radiants provide protection for the burners, create a surface for the flare–up required for charbroiling and provide radiant heat to the product.

Water Tubs

The tubs are designed to reduce flare–up and eliminate flash back. Any flaming grease that drips down is extinguished when it hits the water. The tubs should be ¾ full of water. **NEVER allow the water tubs to run dry.**

Grease Box

The majority of the grease will travel down the front trough and into the grease box. The grease box must be in place while operating the unit

.

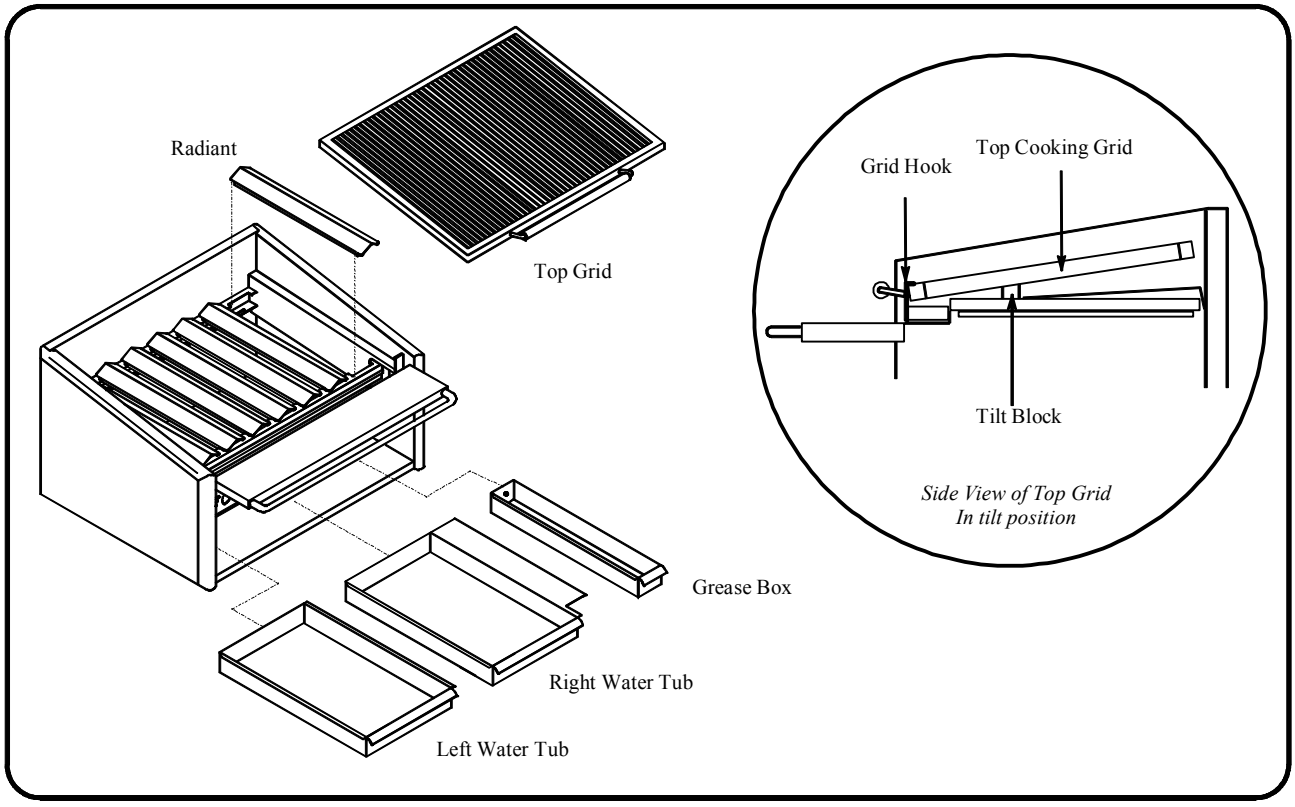


Figure 3

Lighting Instructions

1. Turn all burners to OFF.
2. Remove the top grid.
3. Remove the last radiant on the right.
4. Turn the shut off valve to ON.
5. Press and hold the reset (blue) button on the safety pilot valve. Wait 15–30 seconds. Light the runner tube. DO NOT release the reset button.

   NOTE: If the runner tube does not light, wait a few seconds, then try again.

   NOTE: When lighting the runner tube for the first time after connecting the unit to the gas source, the light time will probably increase to 1–2 minutes.

6. Wait an additional 15–30 seconds. Release the reset button. The runner tube should remain lit.

   NOTE: If the runner tube fails to ignite, repeat step 5. If the runner tube fails to ignite after three attempts, contact an authorized MagiKitch'n service agent.

7. Replace the radiant and top grid.
8. Push and turn the burner valves to operate the individual burners as needed.

Broiler Shut Down

1. Turn the shut off valve to OFF.
2. Turn all burners to OFF.

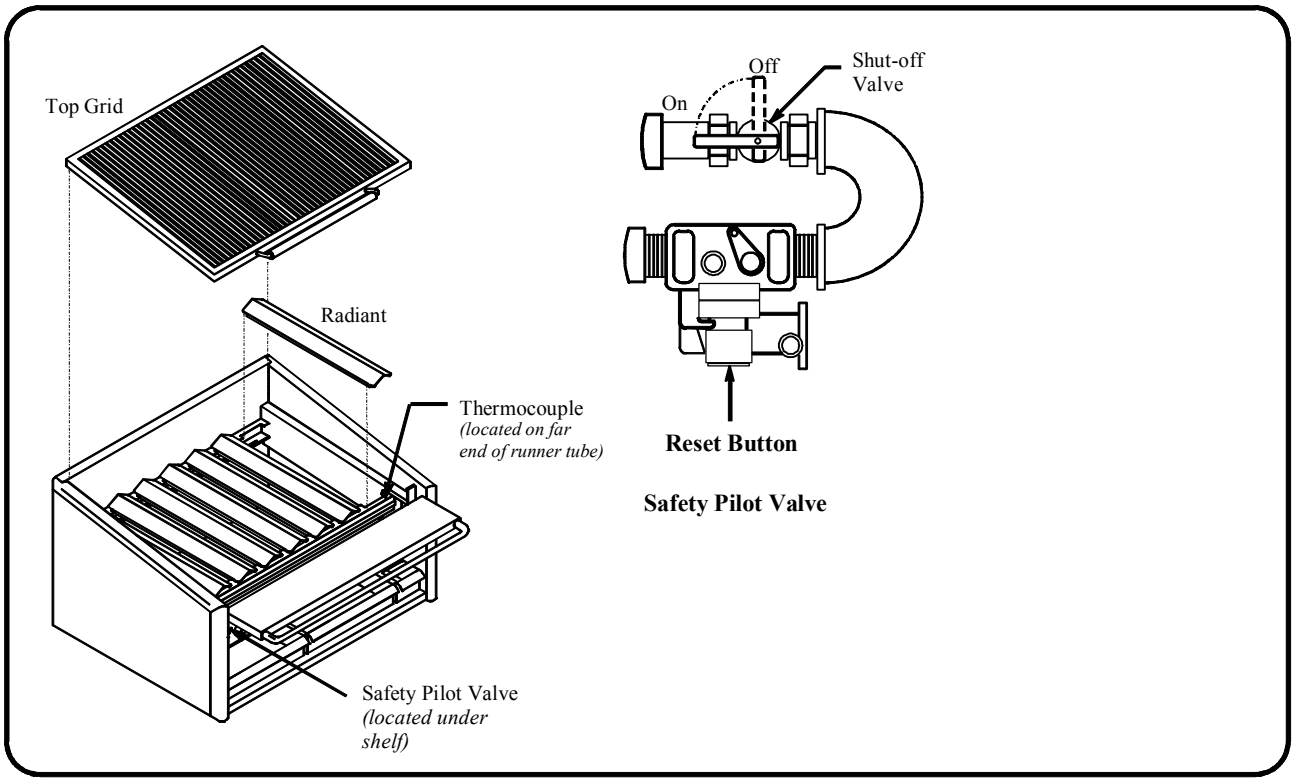


Figure 4

General Charbroiling Tips

PREHEATING

The broiler must be preheated before cooking. We recommend a preheat time of 10-15 minutes. After preheating, the broiler will be hot enough to cook on without sticking and will produce the proper searing effect.

COOK ZONES

There are three separate cooking zones on your MagiKitch'n charbroiler:

- The front 1/3 of the broiler is the coolest section.
- The center 1/3 of the broiler has medium heat.
- The rear 1/3 of the broiler is the hottest. (even though it is the farthest from the burner in the tilt position)

The three cook zones enable more efficient cooking without flame adjustment. It is possible to cook a rare, medium and well done steak in the same amount of time simply by placing the product in different cook zones. The cooking process can also be slowed or increased by moving product between zones.

FLARE–UP

In charbroiling, a certain amount of flare–up is desirable in order to flavor the product. However, excess flare–up burns product and leaves a bitter taste. Generally, flare–up increases with the heat of the broiler and the fat content of the product.

Heat	Product Fat Content	
	High	**Low**
High	High Flare–up	Moderate
Low	Moderate	Low Flare–up

The cook zones can be used to advantage during peak periods. High fat product can be cooked in the cool front section, while lean product is placed on the hotter rear section. This allows for better control of flare–up and product quality.

General Charbroiling Tips

MARKING PRODUCT

1. Place the product diagonally on the back 1/3 of a clean broiler grid.

   NOTE: For white fleshed product (chicken, fish) be sure Marking product to baste the product and brush the grid with pure vegetable oil.

2. When the product is marked, rotate it ¼ turn to provide the diamond pattern.

   NOTE: This step can be eliminated if only one line is desired.

3. When the diamond mark is achieved, turn the food over and move to the middle cook zone to finish broiling. DO NOT turn the food over to the marked side or the pattern will be marred.

   NOTE: For thicker and well done products, move the product to the front cook zone.

   NOTE: Check the internal product temperature on the unmarked side.

4. Serve the food with the pattern facing up.

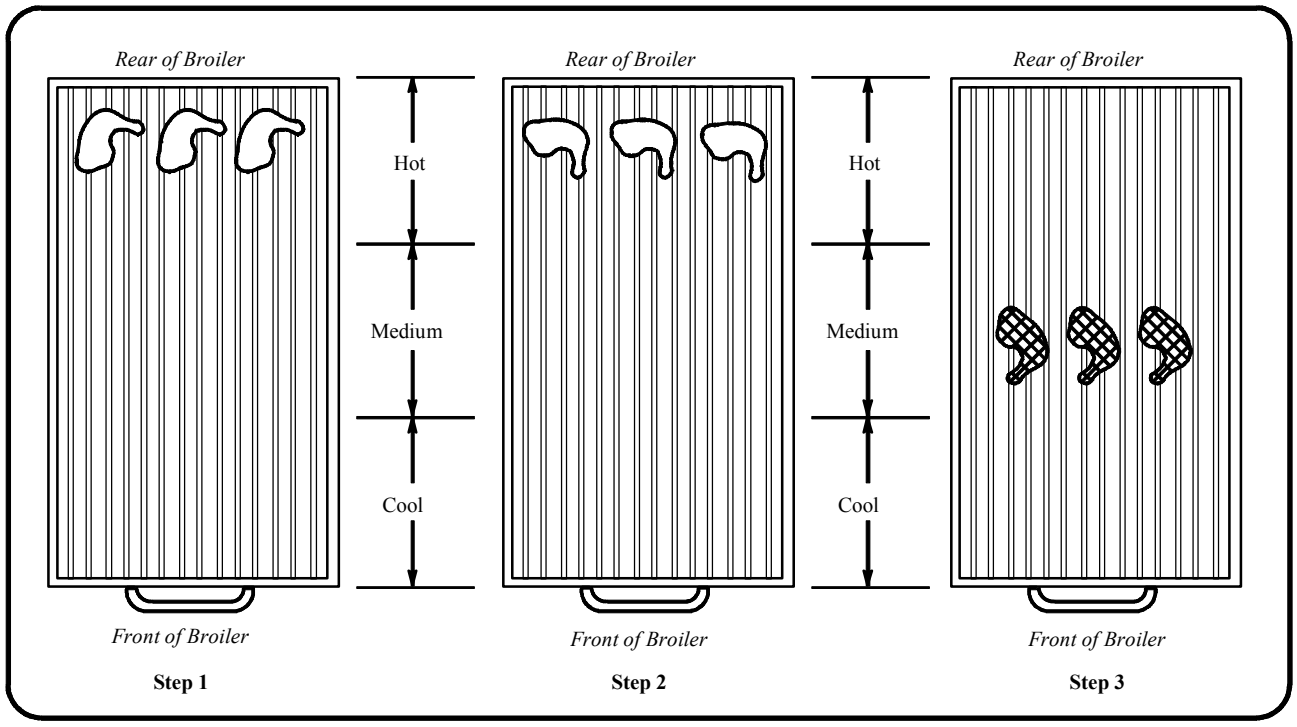


Figure 5

Cleaning and Preventative Maintenance

Proper maintenance of your broiler will prolong the life of the appliance and ensure proper performance.

DAILY CLEANING

Top Grid

1. Remove the grid.
2. Use the MagiKitch'n scraper to remove any cooking debris from the rods, especially the underside.
3. Clean the frame including the tubes and angles on the sides, front and back with steel wool.

Cabinet, Shelves, Water Tubs, and Grease Boxes

These parts are stainless steel and can be cleaned with any non–toxic industrial stainless steel cleaner.

1. Apply cleaners when the broiler is cold. Always rub with the grain of the metal.

Water Tubs

Empty the excess grease and water. Wipe the tubs clean.

Grease Box

The grease box should be emptied daily.

WEEKLY CLEANING

Soak the top grid in a degreasing solution. The grid will need to be re–seasoned after soaking.

ANNUAL MAINTENANCE AND INSPECTION

The unit should be inspected annually by a qualified gas appliance service personnel.

The main burner valves should be greased annually, or as necessary, to maintain smooth operation and prevent gas leakage.

1. Remove the knobs from the front of the unit.
2. Remove the outer front panel.
3. Loosen the two screws securing the collar to each valve.
4. Carefully disassembly the valves. See Figure 6.
5. Clean all parts.
6. Apply high temperature valve grease to the rotor assembly.

   NOTE: The valve grease must be suitable for all gas types.
7. Reassemble the valves and broiler.

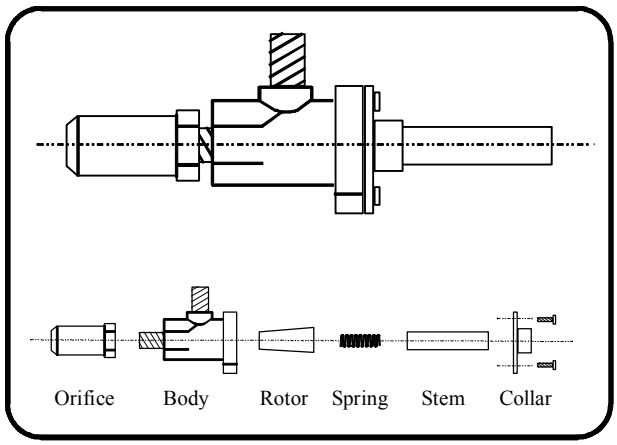


Figure 6

Accessory and Replacement Parts List

NOTE: This is a partial parts list for parts not shown here, call MagiKitch'n or a MagiKitch'n service representative. Always give the Model and Serial Numbers of your unit when ordering parts and accessories.

Item	Description
1	Top grid
2	Radiant
3	Burner
4	Burner clip
5	Baffle, right side
6	Baffle, left side
7	Outer side
8	Inner side (right)
9	Inner side (left)
10	Drip cup
11	Outer back
12	Inner back
13	Rear support angle
14	Rear burner support
15	Water tub
16	Grease trough
17	Towel bar
18	Lower shelf
19	Upper shelf
20	Base assembly
21	Upper shelf
22	Inlet manifold
23	Runner tube
24	Inner front assembly
25	90° elbow with clip

Item	Description
26	Valve (push to turn)
27	Pressure tap orifice
28	Heat shield
29	
30	Manifold, weld assembly
31	Outer front
32	Knob
33	Grease trough
34	Service shelf
35	Service shelf support
36	Thermocouple (not shown)
37	Thermocouple bracket (not shown)
38	
39	
40	
41	½" NPT Jam nut
42	½" FNPT Shut off valve
43	½" NPT nipple
44	¾" MNPT x ½" FNPT adaptor
45	180° return elbow
46	¾" close nipple
47	Safety pilot valve
48	Runner supply tube
49	

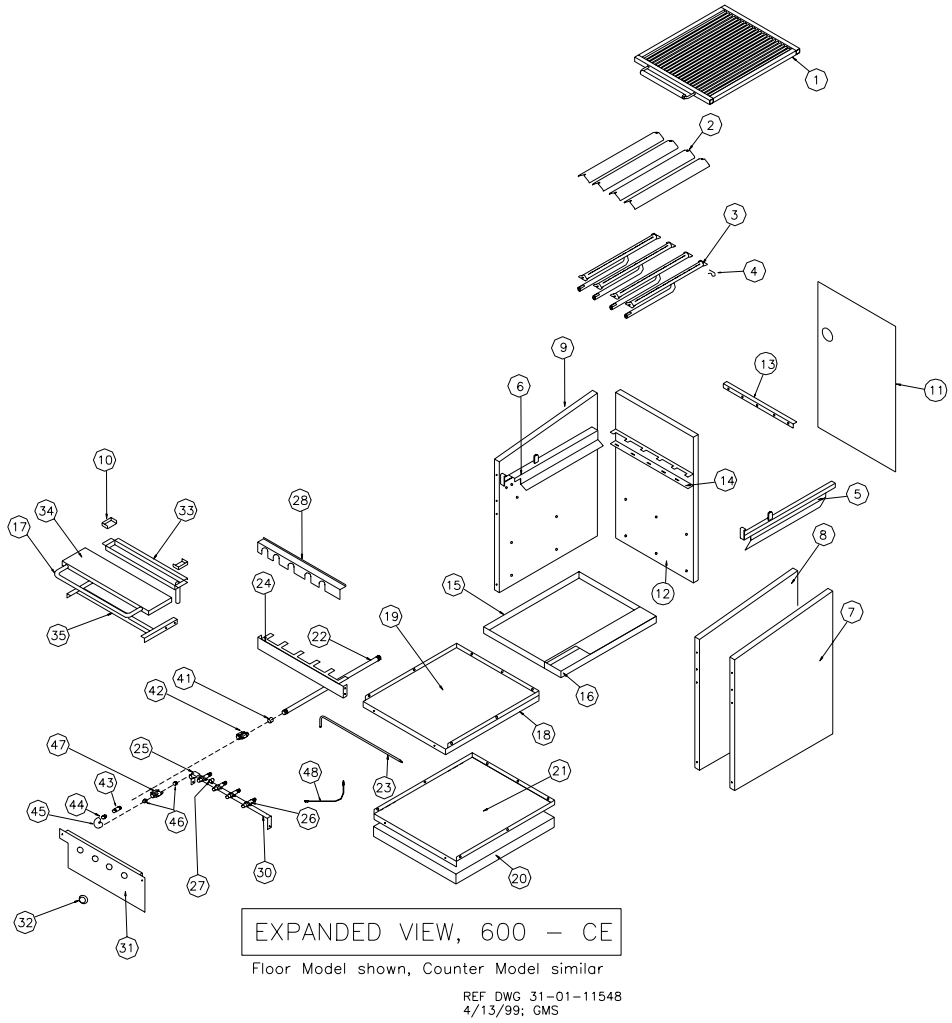

EXPANDED VIEW, 600 – CE
Floor Model shown, Counter Model similar
REF DWG 31-01-11548
4/13/99; GMS

Figure 7

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MAGIKITCH'N

SMB
600 SERIES-CE
GAS BROILER
MODEL SPECIFIC INSTRUCTIONS

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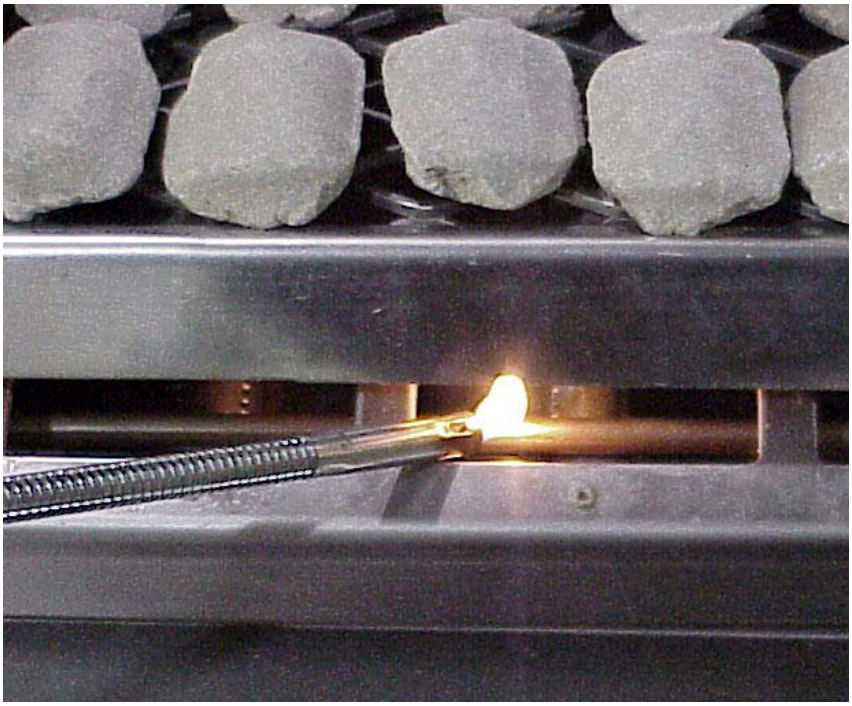
1. Lighting Instructions
2. Initial Set Up
3. SMB 600 Series Illustration
4. Accessories and Parts List

1. LIGHTING INSTRUCTIONS



SMB 600 Series -CE Models with safety pilot

1. Turn all burners to OFF.
2. Remove the top grid.
3. Turn the shut off valve to ON.
4. Press and hold the reset (blue) button on the safety pilot valve. Wait 15–30 seconds. Light the runner tube. DO NOT release the reset button.

   NOTE: If the runner tube does not light, wait a few seconds, then try again.

NOTE: When lighting the runner tube for the first time after connecting the unit to the gas source, the light time will probably increase to 1–2 minutes.

5. Wait an additional 15–30 seconds. Release the reset button. The runner tube should remain lit.

   NOTE: If the runner tube fails to ignite, repeat step 5. If the runner tube fails to ignite after three attempts, contact an authorized MagiKitch'n service agent.

5. Replace the top grid.
6. Push and turn the burner valves to operate the individual burners as needed.

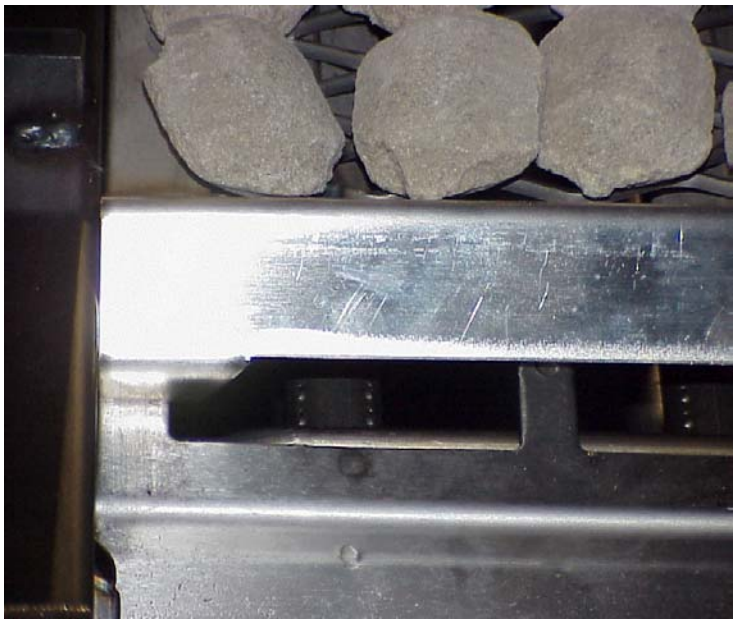
Broiler Shut Down

1. Turn the shut off valve to OFF.
2. Turn all burners to OFF.

2. INITIAL SET-UP

SMB 600 Series-CE models

COAL SUPPORT - The coal support must be installed so that it is pushed against the back wall of the unit. This creates an air gap over the runner tube to allow proper ventilation.

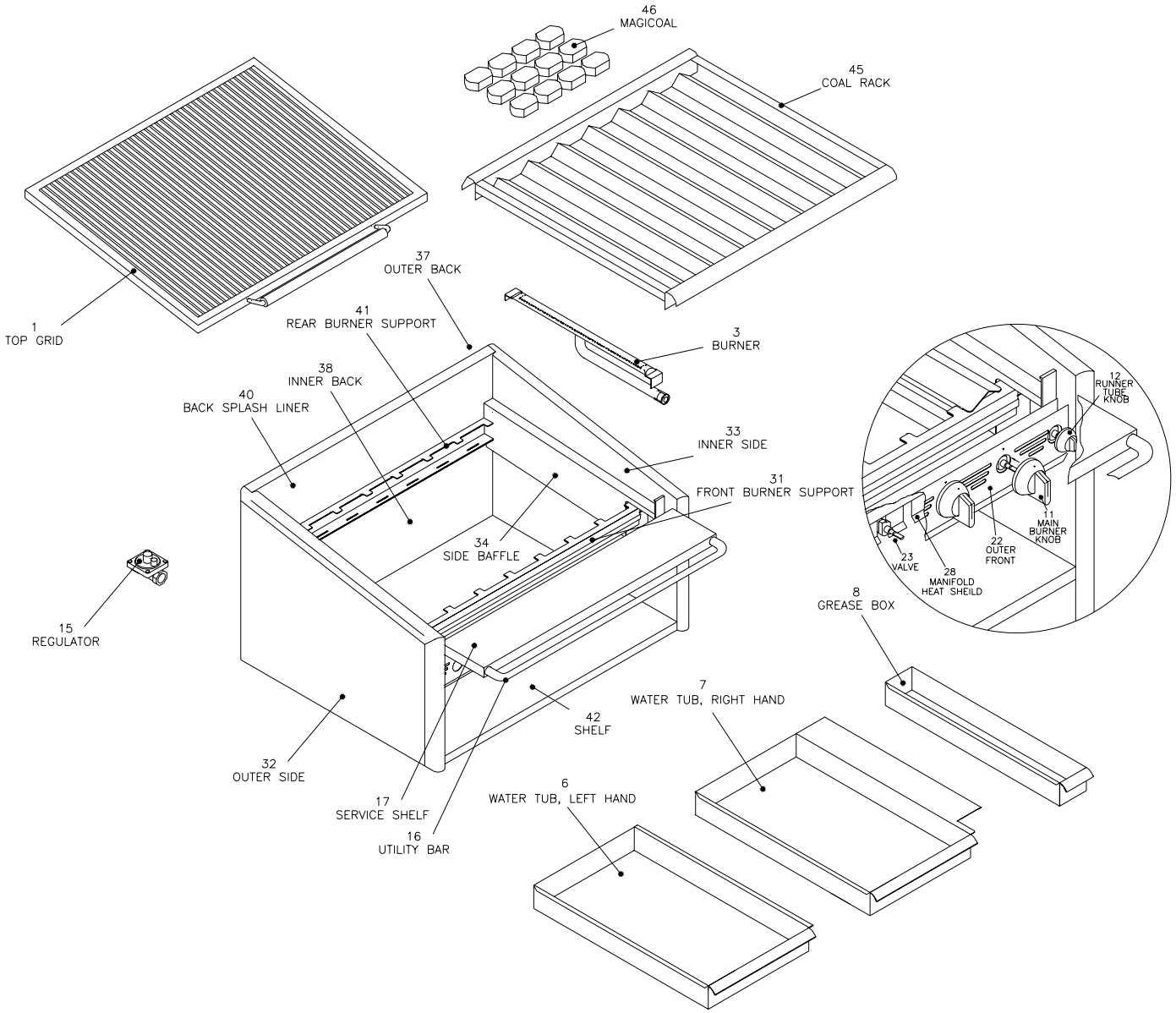


COALS - Use only Magicoals supplied by MagiKitch'n. Do not use lava rock or other replacement coals. They do not perform as well or last as long as the Magicoals that were designed for this application. Place the coals evenly across the surface of the coal support. Do not pile them up. This will cause excessive flare up, reduce ventilation, and cause overheating of the valves and other components.

PREHEATING - It is necessary to preheat a cold broiler each time before cooking. The recommended time is 15-20 minutes for coal style charbroilers, at which time the cooking grid should be hot enough to cook on without sticking, and will produce the proper searing effect.

3. TYPICAL SMB 600 SERIES ILLUSTRATION (Model SMB 636 shown)

Note: Your unit may vary from this typical diagram.



4. ACCESSORY / PARTS LIST FOR SMB 600 SERIES MODELS

Not all parts are illustrated, nor are all parts are listed. If you need a part that is not listed here, call MagiKitch'n for a quote. Always have your model and unit serial numbers available when phoning or ordering.

THESE PARTS SOLD THRU OUR DEALER NETWORK ONLY.

Ref. No.	Description
1	Top Grid, Standard
2	Radiant
3	Burner
4	Burner retaining clip (not shown)
5	Runner tube (not shown)
6	Water Tub, Left Hand
7	Water Tub, Right Hand
8	Grease Box
9	Leg, 6" (not shown)
10	Caster, 6" (not shown)
11	Knob, main burner
12	Knob, runner tube
13	Scraper (not shown)
14	Brush (not shown)
15	Regulator
16	Utility bar
17	Service shelf
18	Service shelf support (not shown)
19	LH Frame mtg brkt (not shown)
20	RH Frame mtg brkt (not shown)
21	Grease trough
22	Outer front

Ref. No.	Description
23	Gas valve, main burner
24	Gas valve,runner tube (not shown)
25	Orifice, main burners (not shown)
26	Orifice, runner tube (not shown)
27	Manifold assembly (not shown)
28	Manifold heat shield
29	Inner heat shield (not shown)
30	Inner front (not shown)
31	Front burner support
32	Outer side
33	Inner side
34	Side baffle
35	Side baffle support (not shown)
36	Top grid center support (not shown) (48/60/72 only)
37	Outer back (not shown)
38	Inner back
39	Back stiffener (not shown)
40	Back splash liner
41	Rear burner support
42	Shelf
43	Inner bottom (FM only, not shown)
44	Outer bottom (not shown)
45	Coal Rack
46	Coals

MAGIKITCH'N®

Original Equipment Limited Warranty

MagiKitch'n appliances are designed to give you long and satisfactory service if installed and operated in accordance with our instructions. We warrant this appliance against defective workmanship and material for one year form installation or 15 months from ship date, and agree to replace free of charge and defective parts or equipment returned to us. This warranty does include travel time not to exceed 2 hours and mileage not to exceed 50 miles.

WARRANTY LIMITATIONS OR EXCLUSIONS :

Radiants and coal support are warranted for 6 months only.

Accidental damage, misuse, harsh cleaning chemical usage, and normal wear of this appliance are not warranted.

Conversion or adjusting of gas components (i.e.; pilots, orifices, burners, valves or regulators) unless duly authorized by MagiKitch'n or it's ASAP agent.

Not Warranted:

Accident to, misuse of, harsh chemical cleaners, or natural wear of this appliance.

Conversion or adjusting of gas components (i.e.; pilots, orifices, burners, valves or regulators).

IMPORTANT: DO NOT destroy any defective part – it must be returned for replacement under this warranty.
When writing, be sure to mention the Serial Number and Model Number appearing on the nameplate on the front of your equipment.

Keep for your records

This Warranty cannot protect you unless your MagiKitch'n appliance is registered at the factory. For your own protection, mail the attached card WITHIN TEN DAYS after this appliance has been installed, or the WARRANTY WILL BE VOID.

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